

We claim:

1. A method for managing liquidity requirements of asset backed commercial paper, the method comprising:
  - determining a full liquidity requirement for commercial paper commitments of at least one financial institution;
  - determining ratings of assets backing the commitments;
  - determining probabilities of rating changes of the assets; and
  - calculating a liquidity requirement for the commitments that is less than the full liquidity requirement for the commitments using at least the ratings and probabilities of rating changes.
2. A method according to claim 1, further comprising:
  - determining probabilities of draw on liquidity for the assets;
  - determining probabilities of extent of draw on liquidity for the assets; and
  - calculating the liquidity requirement using at least the probabilities of draw and the probabilities of extent of draw.
3. A method according to claim 1, further comprising:
  - determining probabilities of existence of a draw on liquidity for the assets;
  - determining probabilities of continued draw on liquidity for the assets; and
  - calculating the liquidity requirement using at least the probabilities of existence of draw and the probabilities of continued draw.
4. A method according to claim 1, wherein the at least one financial institution further comprises a plurality of banks, the method further comprising:

determining probabilities of default by the plurality of banks; and  
calculating the liquidity requirement using at least the probabilities of default.

5. A method according to claim 1, wherein the assets backing the commitments are correlated, the method further comprising:  
creating a virtual portfolio of uncorrelated assets, which model the assets backing the commitments; and  
calculating the liquidity requirement using at least the virtual portfolio.

6. A method according to claim 1, wherein the assets backing the commitments are correlated, the method further comprising:  
determining a diversity score for the assets;  
determining characteristics of the assets; and  
calculating the liquidity requirement using at least the diversity score and the characteristics of the asset.

7. A method according to claim 1, wherein calculating the liquidity requirement uses at least a Monte-Carlo technique.

8. A method according to claim 1, wherein the probabilities of rating changes considers characteristics of the assets.

9. A method according to claim 1, wherein the at least one financial institution further comprises a plurality of banks, the method further comprising allocating the less than the full liquidity requirement among the plurality of banks.

10. A method according to claim 9, wherein the less than the full liquidity requirement is a percentage of the full liquidity requirement and the allocation is substantially the same percentage for each of the plurality of banks.

11. Computer executable software code transmitted as an information signal, the code for managing liquidity requirements of asset backed commercial paper, the code comprising:

code to determine a full liquidity requirement for commercial paper commitments of at least one financial institution;

code to determine ratings of assets backing the commitments;

code to determine probabilities of rating changes of the assets; and

code to calculate a liquidity requirement for the commitments that is less than the full liquidity requirement for the commitments using at least the ratings and probabilities of rating changes.

12. A computer-readable medium having computer executable software code stored thereon, the code for managing liquidity requirements of asset backed commercial paper, the code comprising:

code to determine a full liquidity requirement for commercial paper commitments of at least one financial institution;

code to determine ratings of assets backing the commitments;

code to determine probabilities of rating changes of the assets; and

code to calculate a liquidity requirement for the commitments that is less than the full liquidity requirement for the commitments using at least the ratings and probabilities of rating changes.

13. A programmed computer for managing liquidity requirements of asset backed commercial paper, comprising:

a memory having at least one region for storing computer executable program code; and

a processor for executing the program code stored in the memory; wherein the program code comprises:

code to determine a full liquidity requirement for commercial paper commitments of at least one financial institution;

code to determine ratings of assets backing the commitments;

code to determine probabilities of rating changes of the assets; and

code to calculate a liquidity requirement for the commitments that is less than the full liquidity requirement for the commitments using at least the ratings and probabilities of rating changes.

14. A method for managing liquidity requirements of asset backed commercial paper comprising:

determining a full liquidity requirement for commercial paper commitments of a plurality of banks;

determining public agency ratings of assets backing the commitments;

determining probabilities of rating changes of the assets using data from past rating changes;

determining probabilities of draw on liquidity for the assets using data from past draws on liquidity;

determining probabilities of extent of draw on liquidity for the assets using data from past extent of draw on liquidity;

determining probabilities of existence of draw on liquidity for the assets using data from past existence of draw on liquidity;

determining probabilities of continued draw on liquidity for the assets using data from past continued draw on liquidity;

calculating a percentage reduced liquidity requirement for the commitments using a Monte-Carlo technique and at least the public agency ratings, the probabilities of rating changes, the probabilities of draw on liquidity, the probabilities of extent of draw, the probabilities of existence of a draw, and the probabilities of continued draw; and

substantially uniformly allocating the percentage reduced liquidity requirement among the plurality of banks.

15. A method for issuing asset backed commercial paper, the method comprising:

receiving a liquidity commitment from at least one financial institution for a particular asset backed commercial paper issue, wherein the liquidity commitment assures full liquidity for the particular commercial paper issue and represents less than full liquidity for a portfolio of asset backed commercial paper issues, and further wherein the less than full liquidity is determined by ratings of the assets backing the portfolio and probabilities of rating changes of the assets backing the portfolio; and

issuing the particular asset backed commercial paper.

16. A method for issuing asset backed commercial paper, the method comprising:

receiving a full liquidity commitment from an entity representing a plurality of banks for a particular asset backed commercial paper issue, wherein the liquidity commitment assures full liquidity for the particular commercial paper issue and represents less than full liquidity for a larger portfolio of asset backed commercial paper issues, and further wherein the less than full liquidity is calculated using ratings of the assets backing the larger portfolio, probabilities of rating changes of the assets backing the larger portfolio, probabilities of draw on liquidity for the assets backing the larger portfolio, probabilities of extent of draw on liquidity for the assets backing the larger portfolio, probabilities of existence of draw on liquidity for the assets backing the larger portfolio, probabilities of continued draw on liquidity for the assets backing the larger portfolio, and probabilities of default by the plurality of banks; and

issuing the particular asset backed commercial paper.

17. A method for investing in asset backed commercial paper, the method comprising:

investing in a particular asset backed commercial paper issue, which has a liquidity commitment from at least one financial institution, wherein the liquidity commitment assures full liquidity for the particular commercial paper issue and represents less than full liquidity for a portfolio of asset backed commercial paper issues, and further wherein the less than full liquidity is determined by ratings of the assets backing the portfolio and probabilities of rating changes of the assets backing the portfolio; and

redeeming the particular asset backed commercial paper.

18. A method for investing in asset backed commercial paper, the method comprising:

investing in a particular asset backed commercial paper issue, which has a full liquidity commitment from an entity representing a plurality of banks for the particular asset backed commercial paper issue, wherein the liquidity commitment assures full liquidity for the particular commercial paper issue and represents less than full liquidity for a larger portfolio of asset backed commercial paper issues, and further wherein the less than full liquidity is calculated using ratings of the assets backing the larger portfolio, probabilities of rating changes of the assets backing the larger portfolio, probabilities of draw on liquidity for the assets backing the larger portfolio, probabilities of extent of draw on liquidity for the assets backing the larger portfolio, probabilities of existence of draw on liquidity for the assets backing the larger portfolio, probabilities of continued draw on liquidity for the assets backing the larger portfolio, and probabilities of default by the plurality of banks; and

redeeming the particular asset backed commercial paper.

19. A method for providing liquidity commitments to asset backed commercial paper, the method comprising providing a liquidity commitment for a particular asset backed commercial paper issue, wherein the liquidity commitment assures full liquidity for the particular commercial paper issue and represents less than full liquidity for a portfolio of asset backed commercial paper issues, and further wherein the less than full liquidity is determined by ratings of the assets backing the portfolio and probabilities of rating changes of the assets backing the portfolio.

20. A method for providing shared liquidity commitments to asset backed commercial paper, the method comprising as one of a plurality of banks, providing a liquidity commitment for a particular asset backed commercial paper issue, wherein the liquidity commitment assures full liquidity for the particular commercial paper issue and represents less than full liquidity for a larger portfolio of asset backed commercial paper issues, and further wherein the less than full liquidity is calculated using ratings of the assets backing the larger portfolio, probabilities of rating changes of the assets backing the larger portfolio, probabilities of draw on liquidity for the assets backing the larger portfolio, probabilities of extent of draw on liquidity for the assets backing the larger portfolio, probabilities of existence of draw on liquidity for the assets backing the larger portfolio, probabilities of continued draw on liquidity for the assets backing the larger portfolio, and probabilities of default by the plurality of banks.

21. A method for managing liquidity requirements of asset backed commercial paper comprising:

determining a full liquidity requirement for individual commercial paper commitments backed by a plurality of financial institutions;

calculating a reduced liquidity requirement for the commitments;

allocating the reduced liquidity requirement among the institutions; and

receiving shared liquidity assurances from the institutions for the individual commitments.

22. A method according to claim 21, wherein calculating the reduced liquidity requirement uses a Monte-Carlo technique.



23. A method according to claim 21, wherein allocating the reduced liquidity requirement is in relative proportion to the individual commercial paper commitments.

24. A method according to claim 21, wherein support for a draw against a particular individual commitment up to a level of the allocated reduced liquidity is assured by at least the institution backing the particular individual commitment.

25. A method according to claim 21, wherein support for a draw against a particular individual commitment above the level of the allocated reduced liquidity is assured by at least the plurality of institutions.

26. A method according to claim 21, wherein calculating the reduced liquidity requirement further comprises:

determining ratings of assets backing the commitments;  
determining probabilities of rating changes of the assets; and  
calculating the reduced liquidity requirement for the commitments using at least the ratings and probabilities of rating changes.

27. A method according to claim 26, wherein the probabilities of rating changes considers characteristics of the assets.

28. A method according to claim 21, wherein calculating the reduced liquidity requirement further comprises:

determining probabilities of draw on liquidity for the commitments;  
determining probabilities of extent of draw on liquidity for the commitments; and

calculating the reduced liquidity requirement using at least the probabilities of draw and the probabilities of extent of draw.

29. A method according to claim 21, wherein calculating the reduced liquidity requirement further comprises:

determining probabilities of existence of a draw on liquidity for the commitments;

determining probabilities of continued draw on liquidity for the commitments;

and

calculating the reduced liquidity requirement using at least the probabilities of existence of draw and the probabilities of continued draw.

30. A method according to claim 21, wherein the plurality of financial institutions further comprise a plurality of banks, the method further comprising:

determining default probabilities of the plurality of banks; and

calculating the reduced liquidity requirement using at least the default probabilities of the plurality of banks.

31. A method according to claim 21, wherein the individual commercial paper commitments are backed by correlated assets, the method further comprising:

creating a virtual portfolio of uncorrelated assets, which model the assets backing the commitments; and

calculating the reduced liquidity requirement using at least the virtual portfolio.

32. A method according to claim 21, wherein the individual commercial paper commitments are backed by correlated assets, the method further comprising:

determining actual characteristics of the assets; and

calculating the reduced liquidity requirement using at least the actual characteristics of the asset.

33. A method according to claim 21, wherein the plurality of financial institutions further comprise a plurality of banks, the method further comprising allocating the reduced liquidity requirement among the plurality of banks.

34. A method according to claim 33, wherein the reduced liquidity requirement is a percentage of the full liquidity requirement and the allocation is substantially the same percentage for each of the plurality of banks.

35. Computer executable software code transmitted as an information signal, the code for managing liquidity requirements of asset backed commercial paper, the code comprising:

code to determine a full liquidity requirement for individual commercial paper commitments backed by a plurality of financial institutions;

code to calculate a reduced liquidity requirement for the commitments;

code to allocate the reduced liquidity requirement among the institutions; and

code to receive shared liquidity assurances from the institutions for the individual commitments.

36. A computer-readable medium having computer executable software code stored thereon, the code for managing liquidity requirements of asset backed commercial paper, the code comprising:

code to determine a full liquidity requirement for individual commercial paper commitments backed by a plurality of financial institutions;

code to calculate a reduced liquidity requirement for the commitments;  
code to allocate the reduced liquidity requirement among the institutions; and  
code to receive shared liquidity assurances from the institutions for the individual commitments.

37. A programmed computer for managing liquidity requirements of asset backed commercial paper, comprising:

a memory having at least one region for storing computer executable program code; and

a processor for executing the program code stored in the memory; wherein the program code comprises:

code to determine a full liquidity requirement for individual commercial paper commitments backed by a plurality of financial institutions;

code to calculate a reduced liquidity requirement for the commitments;

code to allocate the reduced liquidity requirement among the institutions; and

code to receive shared liquidity assurances from the institutions for the individual commitments.

38. A method for managing liquidity requirements of asset backed commercial paper comprising:

determining a full liquidity requirement for individual asset backed commercial paper commitments, the liquidity commitments provided by a plurality of banks;

determining actual characteristics of individual assets backing the commercial paper commitments;

determining ratings of the individual assets;

determining probabilities of rating changes of the individual assets using data from past rating changes;

determining probabilities of draw on liquidity using data from past draws on liquidity;

determining probabilities of extent of draw on liquidity using data from past extent of draw on liquidity;

determining probabilities of existence of a draw on liquidity using data from past existence of draw on liquidity;

determining probabilities of continued draw on liquidity using data from past continued draw on liquidity;

determining default probabilities of the banks using data from past bank defaults; calculating a percentage reduced liquidity requirement using a Monte-Carlo technique and at least the actual characteristics, the ratings, the probabilities of rating changes, the probabilities of draw, the probabilities of extent of draw, the probabilities of existence of draw, the probabilities of continued draw and the default probabilities of the banks;

allocating the percentage reduced liquidity requirement among the banks; and

receiving shared liquidity assurances from the banks for the reduced liquidity requirement, wherein support for a draw against a particular commitment up to a level of the allocated reduced liquidity is assured by at least the bank providing the liquidity commitment, and support for a draw against a particular commitment above the level of the allocated reduced liquidity is assured by the plurality of banks.

39. A method for issuing asset backed commercial paper, the method comprising:

receiving from a plurality of financial institutions, a shared liquidity assurance for a particular asset backed commercial paper issue, wherein the shared liquidity assurance represents an allocation of less than a full liquidity requirement among the institutions; and

issuing the particular asset backed commercial paper.

40. A method for issuing asset backed commercial paper, the method comprising:

receiving a shared liquidity assurance from a plurality of banks for a particular asset backed commercial paper issue, wherein the shared liquidity assurance represents a percentage allocation among the banks of less than a full liquidity requirement for a larger portfolio of asset backed commercial paper issue, wherein the percentage allocation is calculated using ratings of the assets backing the larger portfolio, probabilities of rating changes of the assets backing the larger portfolio, probabilities of draw on liquidity for the assets backing the larger portfolio, probabilities of extent of draw on liquidity for the assets backing the larger portfolio, probabilities of existence of draw on liquidity for the assets backing the larger portfolio, probabilities of continued draw on liquidity for the assets backing the larger portfolio, and probabilities of default by the plurality of banks; and

issuing the particular asset backed commercial paper.

41. A method for investing in asset backed commercial paper, the method comprising:

investing in a particular asset backed commercial paper issue, which has a shared liquidity assurance from a plurality of financial institutions, wherein the shared liquidity assurance represents an allocation among the institutions of less than a full liquidity requirement; and

redeeming the particular asset backed commercial paper.

42. A method for investing in asset backed commercial paper, the method comprising:

investing in a particular asset backed commercial paper issue, which has a shared liquidity assurance from a plurality of banks, wherein the shared liquidity assurance represents a percentage allocation among the banks of less than a full liquidity requirement for a larger portfolio of asset backed commercial paper issues, wherein the percentage allocation is calculated using ratings of the assets backing the larger portfolio, probabilities of rating changes of the assets backing the larger portfolio, probabilities of draw on liquidity for the assets backing the larger portfolio, probabilities of extent of draw on liquidity for the assets backing the larger portfolio, probabilities of existence of draw on liquidity for the assets backing the larger portfolio, probabilities of continued draw on liquidity for the assets backing the larger portfolio, and probabilities of default by the plurality of banks; and

redeeming the particular asset backed commercial paper.

43. A method for providing liquidity assurance to asset backed commercial paper, the method comprising as a member of a plurality of financial institutions, providing a shared liquidity assurance for a particular asset backed commercial paper

issue, wherein the shared liquidity assurance represents an allocation among the plurality of institutions of less than a full liquidity requirement.

44. A method for providing liquidity assurance to asset backed commercial paper, the method comprising as a member of a plurality of banks, providing a shared liquidity assurance for a particular asset backed commercial paper issue, wherein the shared liquidity assurance represents a percentage allocation among the banks of less than a full liquidity requirement for a larger portfolio of asset backed commercial paper, wherein the percentage allocation is calculated using ratings of the assets backing the larger portfolio, probabilities of rating changes of the assets backing the larger portfolio, probabilities of draw on liquidity for the assets backing the larger portfolio, probabilities of extent of draw on liquidity for the assets backing the larger portfolio, probabilities of existence of draw on liquidity for the assets backing the larger portfolio, probabilities of continued draw on liquidity for the assets backing the larger portfolio, and probabilities of default by the plurality of banks.

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